

INDUCTIVELY COUPLED PLASMA- ATOMIC EMISSION SPECTROMETRY EPA 6010C REVISION 3 (2/2007)					Page 1 of 2
Facility Name: _____ VELAP ID _____					
Assessor Name: _____ Analyst Name: _____ Inspection Date _____					
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
<i>Records Examined:</i> SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Was spectral information related to interferences of background emissions correction documented and kept on file?	4.2.2, 10.1.1				
When interelement corrections were not used, were absences of interferences verified and kept on file with sample data?	4.2.10				
Were rinse times adequate to prevent memory interference? (If the required rinse time has not been established, the laboratory may use a rinse period of at least 60 seconds between samples and standards.)	4.5				
Were linear dynamic range determinations documented, using at least three standards for each wavelength? (Standards should be within $\pm 10\%$ of the true value.)	10.1.1, 10.3.4, 10.4				
Were samples that exceeded the LDR diluted and reanalyzed, OR did the analyst use an alternate less sensitive calibration for which quality control data were already established?	9.5				
Were LCS samples fortified to action-levels or the mid-point of the linear dynamic range?	9.7				
Were LCS samples within $\pm 20\%$ of the spiked value?	9.7				
Were failed LCS samples rerun no more than once?	9.7				
Were matrix spikes within $\pm 25\%$ of the spiked value?	9.5				
If spike recoveries were unacceptable, was matrix interference confirmed? The same sample from which the spike was prepared is spiked with a post-digestion spike OR another sample from the same preparation is used. The new spike should be within 10-100 times the lower limit of quantitation and produce a recovery of 80-120%.	9.9.1, 9.9.2				
Notes/Comments:					

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If matrix interference was confirmed, was the dilution test run on the sample demonstrating the interference? The sample is diluted 1:5, and a result NOT within ± 10 percent of the original determination reconfirms interference.	9.9.1, 9.9.2					
Were lower limits of quantitation established for all wavelengths, each matrix, and each preparation method, carrying the lower limit of quantitation check (LLQC) sample through the entire procedure?	10.1.3					
Were LLQCs within $\pm 30\%$ of true value?	10.1.3.1					
Were mid-level initial calibration verification standards (ICVs) prepared from sources independent from those of the calibration standards, using the same acid combination/ concentration as will result in the samples following processing?	10.3.1					
Were low-level ICVs (LLICVs) prepared from the same source as the calibration standards and given acceptance criteria within ± 30 of the true value?	10.3.1, 10.3.3					
Were LLICVs analyzed prior to sample analysis and at the end of each batch?	10.3.3 10.3.4					
Were calibrations done daily, using a minimum of one blank and one standard?	10.3.2					
Did calibration curves have correlation coefficients greater than or equal to 0.998?	10.3.2.1					
When the correlation coefficient requirement was not met, were only lowest or highest standards removed, leaving at least three non-zero standards?	10.3.2.1					
When single point calibration was used, were sample quantitation limits not lower than the LLICV or the low calibration and/or verification standard?	10.3.3					
Were calibrations verified every ten samples and at the end of each run by a continuing calibration blank (acceptance criteria of <lower limit of quantitation) and a same-source mid-range continuing calibration verification standard (acceptance criteria of $\pm 10\%$)?	10.3.4					
When CCB/CCVs failed, were the samples following the last acceptable CCB/CCV reanalyzed?	10.3.4					
If groundwater or other aqueous samples designated for dissolved metals were acidified and, prefiltered, and not digested, were they matrix-matched with the standards or were internal standards used? (All QC samples must undergo the same preparation and procedures.)	11.1					
Notes/Comments:						